

Input Set: I454684.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

PS

```

1  <110> APPLICANT: Probst, Peter
2      Bhatia, Ajay
3      Skeiky, Yasir
4      Fling, Steve
5      Maisonneuve, Jeff
6  <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
7      DIAGNOSIS OF CHLAMYDIAL INFECTION
8  <130> FILE REFERENCE: 210121.469C4
9  <140> CURRENT APPLICATION NUMBER: US/09/454,684
10 <141> CURRENT FILING DATE: 1999-12-03
11 <160> NUMBER OF SEQ ID NOS: 303
12 <170> SOFTWARE: FastSEQ for Windows Version 3.0/4.0
13 <210> SEQ ID NO 1
14 <211> LENGTH: 481
15 <212> TYPE: DNA
16 <213> ORGANISM: Chlamydia trachomatis
17 <400> SEQUENCE: 1
18      ctgaagactt ggctatgttt tttattttga cgataaacct agttaaggca taaaagagtt      60
19      gcgaaggaag agccctcaac ttttcttata accttcttta actaggagtc atccatgagt      120
20      caaaataaga actctgcttt catgcagcct gtgaacgtat ccgctgattt agctgccatc      180
21      gttggtgcag gacctatgcc tcgcacagag atcattaaga aaatgtggga ttacattaag      240
22      gagaatagtc ttcaagatcc tacaaacaaa cgtaatatca atcccgatga taaattggct      300
23      aaagtttttg gaactgaaaa acctatcgat atgttccaaa tgacaaaaat ggtttctcaa      360
24      cacatcatta aataaaatag aaattgactc acgtgttcct cgtctttaag atgaggaact      420
25      agttcattct tttgttcgt ttttgtgggt attactgtat ctttaacaac tatcttagca      480
26      g
27 <210> SEQ ID NO 2
28 <211> LENGTH: 183
29 <212> TYPE: DNA
30 <213> ORGANISM: Chlamydia trachomatis
31 <400> SEQUENCE: 2
32      atcgttggtg caggacctat gcctcgca gaagatcatta agaaaatgtg ggattacatt      60
33      aaggagaata gtcttcaaga tcctacaaac aaacgtaata tcaatcccga tgataaattg      120
34      gctaaagttt ttggaactga aaaacctatc gatatgttcc aaatgacaaa aatgggtttct      180
35      caa
36 <210> SEQ ID NO 3
37 <211> LENGTH: 110
38 <212> TYPE: DNA
39 <213> ORGANISM: Chlamydia trachomatis
40 <400> SEQUENCE: 3
41      gctgcgacat catgcgagct tgcaaacc aa catggacatc tccaatttcc ccttctaact      60
42      cgctctttgg aactaatgct gctaccgagt caatcacaat cacatcgacc      110
43 <210> SEQ ID NO 4
44 <211> LENGTH: 555

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/454,684DATE: 12/20/1999  
TIME: 17:52:27

Input Set: I454684.RAW

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45 <212> TYPE: DNA
46 <213> ORGANISM: Chlamydia trachomatis
47 <400> SEQUENCE: 4
48 cggcaccgagc ctaagatgct tatactactt taagggaggc ccttcgtatg ccgcgcacatca 60
49 ttggaataga tattcctgcy aaaaagaaat taaaaataag tcttacatat atttatggaa 120
50 tagggccagc tctttctaaa gagattattg ctagattgca gttgaatccc gaagctagag 180
51 ctgcagagtt gactgaggaa gaggttggtc gactaaacgc tcttttacag tcggattacg 240
52 ttgttgaagg ggatttgcgc cgtcgtgtgc aatctgatat caaacgtctg attactatcc 300
53 atgcttatcg tggacaaaaga catagacttt ctttgcctgt tcgtgggtcag agaacaaaaa 360
54 caaattctcg cacgcgtaag ggtaaacgta aaactattgc aggtagaag aaataataat 420
55 ttttaggaga gagtgttttg gttaaaaatc aagcgcaaaa aagaggcgta aaaagaaaac 480
56 aagtaaaaaa cattccttcg ggcgttgccc atgttaaggc tacttttaaat aatacaattg 540
57 taaccataac agacc 555
58 <210> SEQ ID NO 5
59 <211> LENGTH: 86
60 <212> TYPE: PRT
61 <213> ORGANISM: Chlamydia trachomatis
62 <400> SEQUENCE: 5
63 Met Ser Gln Asn Lys Asn Ser Ala Phe Met Gln Pro Val Asn Val Ser
64 1 5 10 15
65 Ala Asp Leu Ala Ala Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu
66 20 25 30
67 Ile Ile Lys Lys Met Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp
68 35 40 45
69 Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val
70 50 55 60
71 Phe Gly Thr Glu Lys Pro Ile Asp Met Phe Gln Met Thr Lys Met Val
72 65 70 75 80
73 Ser Gln His Ile Ile Lys
74 85
75 <210> SEQ ID NO 6
76 <211> LENGTH: 61
77 <212> TYPE: PRT
78 <213> ORGANISM: Chlamydia trachomatis
79 <400> SEQUENCE: 6
80 Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu Ile Ile Lys Lys Met
81 1 5 10 15
82 Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp Pro Thr Asn Lys Arg
83 20 25 30
84 Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys
85 35 40 45
86 Pro Ile Asp Met Phe Gln Met Thr Lys Met Val Ser Gln
87 50 55 60
88 <210> SEQ ID NO 7
89 <211> LENGTH: 36
90 <212> TYPE: PRT
91 <213> ORGANISM: Chlamydia trachomatis
92 <400> SEQUENCE: 7
93 Ala Ala Thr Ser Cys Glu Leu Ala Asn Gln His Gly His Leu Gln Phe
94 1 5 10 15
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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/454,684

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95      Pro Leu Leu Thr Arg Ser Leu Glu Leu Met Leu Leu Pro Ser Gln Ser
96                20                25                30
97      Gln Ser His Arg
98                35
99      <210> SEQ ID NO 8
100     <211> LENGTH: 18
101     <212> TYPE: PRT
102     <213> ORGANISM: Chlamydia trachomatis
103     <400> SEQUENCE: 8
104      Leu Arg His His Ala Ser Leu Gln Thr Asn Met Asp Ile Ser Asn Phe
105      1                5                10                15
106      Pro Phe
107     <210> SEQ ID NO 9
108     <211> LENGTH: 5
109     <212> TYPE: PRT
110     <213> ORGANISM: Chlamydia trachomatis
111     <400> SEQUENCE: 9
112      Leu Ala Leu Trp Asn
113      1                5
114     <210> SEQ ID NO 10
115     <211> LENGTH: 11
116     <212> TYPE: PRT
117     <213> ORGANISM: Chlamydia trachomatis
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119      Cys Cys Tyr Arg Val Asn His Asn His Ile Asp
120      1                5                10
121     <210> SEQ ID NO 11
122     <211> LENGTH: 36
123     <212> TYPE: PRT
124     <213> ORGANISM: Chlamydia trachomatis
125     <400> SEQUENCE: 11
126      Val Asp Val Ile Val Ile Asp Ser Val Ala Ala Leu Val Pro Lys Ser
127      1                5                10                15
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129                20                25                30
130      Met Met Ser Gln
131                35
132     <210> SEQ ID NO 12
133     <211> LENGTH: 122
134     <212> TYPE: PRT
135     <213> ORGANISM: Chlamydia trachomatis
136     <400> SEQUENCE: 12
137      Met Pro Arg Ile Ile Gly Ile Asp Ile Pro Ala Lys Lys Lys Leu Lys
138      1                5                10                15
139      Ile Ser Leu Thr Tyr Ile Tyr Gly Ile Gly Pro Ala Leu Ser Lys Glu
140                20                25                30
141      Ile Ile Ala Arg Leu Gln Leu Asn Pro Glu Ala Arg Ala Ala Glu Leu
142                35                40                45
143      Thr Glu Glu Glu Val Gly Arg Leu Asn Ala Leu Leu Gln Ser Asp Tyr
144                50                55                60

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/454,684

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145 Val Val Glu Gly Asp Leu Arg Arg Arg Val Gln Ser Asp Ile Lys Arg  
146 65 70 75 80  
147 Leu Ile Thr Ile His Ala Tyr Arg Gly Gln Arg His Arg Leu Ser Leu  
148 85 90 95  
149 Pro Val Arg Gly Gln Arg Thr Lys Thr Asn Ser Arg Thr Arg Lys Gly  
150 100 105 110  
151 Lys Arg Lys Thr Ile Ala Gly Lys Lys Lys  
152 115 120

153 <210> SEQ ID NO 13

154 <211> LENGTH: 20

155 <212> TYPE: PRT

156 <213> ORGANISM: Chlamydia trachomatis

157 <400> SEQUENCE: 13

158 Asp Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys  
159 1 5 10 15

160 Val Phe Gly Thr  
161 20

162 <210> SEQ ID NO 14

163 <211> LENGTH: 20

164 <212> TYPE: PRT

165 <213> ORGANISM: Chlamydia trachomatis

166 <400> SEQUENCE: 14

167 Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys Pro Ile Asp Met  
168 1 5 10 15

169 Phe Gln Met Thr  
170 20

171 <210> SEQ ID NO 15

172 <211> LENGTH: 161

173 <212> TYPE: DNA

174 <213> ORGANISM: Chlamydia trachomatis

175 <400> SEQUENCE: 15

176 atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcttc atcggaggaa 60  
177 ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac aaaatgctgg 120  
178 cgcaaccggt tctttcttcc caaactaaag caaatatggg a 161

179 <210> SEQ ID NO 16

180 <211> LENGTH: 897

181 <212> TYPE: DNA

182 <213> ORGANISM: Chlamydia trachomatis

183 <400> SEQUENCE: 16

184 atggcttcta tatgcggacg tttagggctt ggtacaggga atgctctaaa agcttttttt 60  
185 acacagccca acaataaaat ggcaagggtg gtaaataaga cgaagggaat ggataagact 120  
186 attaagggtg ccaagtctgc tgccgaattg accgcaaata ttttggaaca agctggaggc 180  
187 gcgggctctt ccgcacacat tacagcttcc caagtgtcca aaggattagg ggatgcgaga 240  
188 actggtgtcg ctttagggaa tgcctttaac ggagcgttgc caggaacagt tcaaagtgcg 300  
189 caaagcttct tctctcacat gaaagctgct agtcagaaaa cgcaagaagg ggatgagggg 360  
190 ctcacagcag atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcatc 420  
191 atcggaggaa ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac 480  
192 aaaatgctgg caaaaccggt tctttcttcc caaactaaag caaatatggg atcttctgtt 540  
193 agctatatta tggcggctaa ccatgcagcg tctgtgggtg gtgctggact cgctatcagt 600  
194 gcggaaagag cagattgcga agcccgtgc gctcgtattg cgagagaaga gtcgttactc 660

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/454,684DATE: 12/20/1999  
TIME: 17:52:27

Input Set: I454684.RAW

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195      gaagtgccgg gagaggaaaa tgcttgcgag aagaaagtcg ctggagagaa agccaagacg      720
196      ttcacgcgca tcaagtatgc actcctcact atgctcgaga agtttttgga atgcgttgcc      780
197      gacgttttca aattggtgcc gctgcctatt acaatgggta ttcgtgcgat tgtggctgct      840
198      ggatgtacgt tcacttctgc aattattgga ttgtgcactt tctgcgccag agcataa      897
199 <210> SEQ ID NO 17
200 <211> LENGTH: 298
201 <212> TYPE: PRT
202 <213> ORGANISM: Chlamydia trachomatis
203 <400> SEQUENCE: 17
204      Met Ala Ser Ile Cys Gly Arg Leu Gly Ser Gly Thr Gly Asn Ala Leu
205      1              5              10              15
206      Lys Ala Phe Phe Thr Gln Pro Asn Asn Lys Met Ala Arg Val Val Asn
207      20              25              30
208      Lys Thr Lys Gly Met Asp Lys Thr Ile Lys Val Ala Lys Ser Ala Ala
209      35              40              45
210      Glu Leu Thr Ala Asn Ile Leu Glu Gln Ala Gly Gly Ala Gly Ser Ser
211      50              55              60
212      Ala His Ile Thr Ala Ser Gln Val Ser Lys Gly Leu Gly Asp Ala Arg
213      65              70              75              80
214      Thr Val Val Ala Leu Gly Asn Ala Phe Asn Gly Ala Leu Pro Gly Thr
215      85              90              95
216      Val Gln Ser Ala Gln Ser Phe Phe Ser His Met Lys Ala Ala Ser Gln
217      100             105             110
218      Lys Thr Gln Glu Gly Asp Glu Gly Leu Thr Ala Asp Leu Cys Val Ser
219      115             120             125
220      His Lys Arg Arg Ala Ala Ala Ala Val Cys Ser Ile Ile Gly Gly Ile
221      130             135             140
222      Thr Tyr Leu Ala Thr Phe Gly Ala Ile Arg Pro Ile Leu Phe Val Asn
223      145             150             155             160
224      Lys Met Leu Ala Lys Pro Phe Leu Ser Ser Gln Thr Lys Ala Asn Met
225      165             170             175
226      Gly Ser Ser Val Ser Tyr Ile Met Ala Ala Asn His Ala Ala Ser Val
227      180             185             190
228      Val Gly Ala Gly Leu Ala Ile Ser Ala Glu Arg Ala Asp Cys Glu Ala
229      195             200             205
230      Arg Cys Ala Arg Ile Ala Arg Glu Glu Ser Leu Leu Glu Val Pro Gly
231      210             215             220
232      Glu Glu Asn Ala Cys Glu Lys Lys Val Ala Gly Glu Lys Ala Lys Thr
233      225             230             235             240
234      Phe Thr Arg Ile Lys Tyr Ala Leu Leu Thr Met Leu Glu Lys Phe Leu
235      245             250             255
236      Glu Cys Val Ala Asp Val Phe Lys Leu Val Pro Leu Pro Ile Thr Met
237      260             265             270
238      Gly Ile Arg Ala Ile Val Ala Ala Gly Cys Thr Phe Thr Ser Ala Ile
239      275             280             285
240      Ile Gly Leu Cys Thr Phe Cys Ala Arg Ala
241      290             295
242 <210> SEQ ID NO 18
243 <211> LENGTH: 18
243 <212> TYPE: PRT
```

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I454684.RAW

Line	Error/Warning	Original Text
602	W "N" or "Xaa" used: Feature required	gatccgaatt cggcacgagg cantatttac tcccaaca
620	W "N" or "Xaa" used: Feature required	gatccgaatt cggcacgagn tttttcctgt tttttctt
645	W "N" or "Xaa" used: Feature required	ccgacaacgt attcattacg tgtaggcggt ttagaaaag
1014	W "N" or "Xaa" used: Feature required	gatccgaatt cggcacgaga aggtagatcc gatntcag
1092	W "N" or "Xaa" used: Feature required	gaaaccttgn tctcttcgnc tctctcctgt agcanaca
1093	W "N" or "Xaa" used: Feature required	tcagcgtatt cggactgatg ccctaaagat cccnggan
1122	W "N" or "Xaa" used: Feature required	aagtattttt atagctgaag aacataggat gagtcgatg
1123	W "N" or "Xaa" used: Feature required	atgaaagact gaataagcta tttgatagcc cctttagt
1124	W "N" or "Xaa" used: Feature required	nagctnagaa caaaattgct agaggagatg ttcgttct
1179	W "N" or "Xaa" used: Feature required	aaagttgnng gggaata
1958	W "N" or "Xaa" used: Feature required	ctcgtagcag atctttgtgt gtctcataag cgcanagc
3272	W "N" or "Xaa" used: Feature required	Gln Arg Thr Ser Asp Gln Gly Leu Val Arg A
3473	W "N" or "Xaa" used: Feature required	Gly Ser Lys Val Xaa Phe
4668	W "N" or "Xaa" used: Feature required	Phe Phe Thr Gly Asn Ser Ala Thr Asn Gly G
4672	W "N" or "Xaa" used: Feature required	Gln Xaa Thr Leu Phe Ala Ser Asn Ser Ala L
4694	W "N" or "Xaa" used: Feature required	Leu Lys Asp Arg Ala Val Leu Ser Xaa Pro S
4696	W "N" or "Xaa" used: Feature required	Gln Ala Leu Leu Ile Met Glu Ala Gly Thr S
4698	W "N" or "Xaa" used: Feature required	Asp Leu Lys Leu Xaa Thr Xaa Ser Ile Pro L
6140	W "N" or "Xaa" used: Feature required	gcgnaaagag cagattgcga agcccgtgc gctcgtat
6178	W "N" or "Xaa" used: Feature required	Val Gly Ala Gly Leu Ala Ile Ser Ala Xaa A
6211	W "N" or "Xaa" used: Feature required	gcgnaaagag cagattgcga agcccgtgc gctcgtat
6249	W "N" or "Xaa" used: Feature required	Val Gly Ala Gly Leu Ala Ile Ser Ala Xaa A
6324	W "N" or "Xaa" used: Feature required	tctctgttac agataaggag actagangca tctagttt
6549	W "N" or "Xaa" used: Feature required	cgtgccgnt

DATE: 12/20/1999  
TIME: 17:52:27

## PREVIOUSLY ERRORED SEQUENCES-EDITED

```

1      <210> 141
2      <211> 18
3      <212> PRT
4      <213> Artificial Sequence
5      <220>
6      <223> Made in a lab
7      <400> 141
8          Tyr Leu Ala Thr Phe Gly Ala Ile Arg Pro Ile Leu Phe Val Asn Lys
9              1              5              10              15
10         Met Leu

```

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/454,684DATE: 12/20/1999  
TIME: 12:40:15

Input Set: I454684.RAW

This Raw Listing contains the General  
Information Section and those Sequences  
containing ERRORS.

Does Not Comply  
Corrected Diskette Needed

1 <110> Probst, Peter  
2 Bhatia, Ajay  
3 Skeiky, Yasir  
4 Fling, Steve  
5 Maisonneuve, Jeff  
6 <120> COMPOSITIONS AND METHODS FOR TREATMENT AND  
7 DIAGNOSIS OF CHLAMYDIAL INFECTION  
8 <130> 210121.469C4  
9 <140> US/09/454,684  
10 <141> 1999-12-03  
11 <160> 303  
12 <170> FastSEQ for Windows Version 3.0/4.0

## ERRORED SEQUENCES FOLLOW

---

13 <210> 141  
14 <211> 18  
15 <212> PRT  
16 <213> Artificial Sequence  
17 <220>  
18 <223> Made in a lab  
E--> 19 <400> 141  
20 Tyr Leu Ala Thr Phe Gly Ala Ile Arg Pro Ile Leu Phe Val Asn Lys  
21 1 5 10 15  
22 Met Leu



PAGE: 2

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/454,684

DATE: 12/20/1999

TIME: 12:40:15

Input Set: I454684.RAW

Line ? Error/Warning

Original Text

-----  
19 E Sequence IDs 14 and 141 differ

-----  
<400> 14

# CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/454,684

CRF Processing Date: 12/20/99  
 Edited by: [Signature]  
 Verified by: [Signature] (STIC staff)

**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☒ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: 141
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95